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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/717,063	11/19/2003	Christopher J. Cookson	3053-069	7228

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EXAMINER	
CHOW, LIXI	

ART UNIT	PAPER NUMBER
2627	

DATE MAILED: 11/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/717,063	COOKSON ET AL.	
	Examiner	Art Unit	
	Lixi Chow	2627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-16 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-10 and 12-16 is/are rejected.

7)☒ Claim(s) 11 is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on 19 November 2003 is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

1. Claims 1-16 are pending in this application.

DETAILED ACTION

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-9 and 15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In regards to claim 1, the preamble of claim 1 is inconsistent with the subject matter claimed in the body of the claim. For example, the preamble of claim 1 specifies that the method of mass producing double-sided optical discs having one or more data layers on each side; however, the body of claim 1 recites the method including a set of master discs for the layers of one side and second set of master discs for the layers of the other side. It is not clear as to how many master disc is needed to produce an optical disc having one data layer.

In regards to claim 15, claim 15 is rejected, because the subject matter in claim 15 contradicts the subject matter claimed in claim 14. For instance, claim 14 recites a first and a second set of master discs; however, claim 15 specifies that the set of master discs includes only one master disc. It is noted that Examiner interpret "a set of master discs" to be "more than one master discs".

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 1, 2, 4-10 and 12-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ito et al. (US 5,581,521; hereafter Ito) in view of Masuda et al. (US 5,633,847; hereafter Masuda).

Regarding claim 1:

Ito discloses a method of mass producing double-sided optical discs, said discs having one or more data layers on each side, comprising:

providing data from a controller to a master producing process (see Fig. 11 and col. 8, lines 8-36);

producing with the process master discs, including a set of master discs for the layers of one side and second set of master discs for the layers of the other side (see Fig. 12A, reference 19 represents one of the master discs used to form one side of the double-sided optical disc), the first set of master discs having data arranged along a first spiral, and the second set of master discs having data arranged along a second spiral; and using said master discs to form said double-sided optical discs (see col. 8, line 37 to col. 9, line 30).

Ito fails to disclose the first and second spiral being mirror images of each other; however Masuda discloses a method of producing double-sided optical discs, wherein the first and second spiral being mirror images of each other (see col. 11, lines 61-65).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify the method of producing double-sided optical discs of Ito, so that the first and second spiral being mirror images of each other as taught by Masuda. One of ordinary

skill in the art would have been motivated to do this, because simultaneous recording/reproducing on/from both side of the optical disc can be realized (see col. 12, lines 8-22).

Regarding claim 2:

Ito discloses the method wherein the step of producing said master discs includes forming on said discs special areas defining rotation direction indicia for the discs to be mass produced (see col. 8, lines 8-27; the header or servo information recorded on the master discs corresponds to the rotation direction indicia).

Regarding claim 4:

Ito discloses the method wherein the data includes a first set of segments for a first side and a second set of segments for a second side, and wherein said step of producing said master discs includes synchronizing the segments to corresponding zones on the master discs such that corresponding segments for said first and second sides are produced on corresponding zones of the master discs (see col. 8, lines 8-37; the data or segments of data are recorded on the corresponding zones of the master discs for each side of the optical disc).

Regarding claim 5:

Ito discloses a method wherein the corresponding zones on the master discs are selected such that the mass produced discs have approximately equal playing speeds for the corresponding data zones (it is inherent that the mass produced discs have approximately equal playing speeds for the corresponding data zones, since the mass produced discs are being replicated from the same master discs).

Regarding claim 6:

Ito discloses the method wherein at least one side of the discs has only a single data layer and one of said sets includes only a single master disc for producing said single data layer (see Figs. 12A-12E; the master disc 43 is used to produce the other side of the double-sided optical disc).

Regarding claim 7:

Ito discloses the method wherein at least one of said sets includes at least two master discs (see Figs. 12A-12C; master discs 19 and 43 corresponds to the set of master discs includes at least two master discs).

Regarding claim 8:

Ito discloses the method wherein said data includes disc characteristic information (it is inherent that the optical disc of Ito includes a disc characteristic information in order to properly carry out the recording/reproducing process). However, Ito does not disclose the method wherein data includes program data. On the other hand, Masuda discloses the method wherein said data includes program data (see col. 11, line 66 to col. 12, line 16).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify the method of Ito, so that data includes program data. One of ordinary skill in the art would have been motivated to do this, because a read-only type optical disc can be realized.

Regarding claim 9:

Ito discloses the method wherein said master discs are arranged to form a main section on the discs, said main section being formatted to accept data, and another section with disc characteristic information defining a manner in which discs are played (see col. 8, lines 9-19; the

write one type or rewritable type optical disc mentioned by Ito suggests that there is a main section on the discs to accept data; also, it is inherent that the optical disc of Ito includes a disc characteristic information in order to properly carry out the recording/reproducing process).

Regarding claim 10:

Ito discloses a system for mass producing optical disc comprising:

a controller transmitting data (see Fig. 11 and col. 8, lines 8-36);

a master producing process receiving the data and generating a first and a second pair of master discs, the first pair of master discs having disposed along a first spiral and a second pair of master discs having data disposed along a second spiral; and a station using said four master discs to make a double-sided optical discs (see Figs. 12A-E and col. 8, line 37 to col. 9, line 30, reference #19 and 43 represent one pair of master discs used to form one side of the double-sided optical disc; therefore, in order to form double-sided optical disc, four master discs are needed).

Ito fails to disclose the first and second spiral being mirror images of each other; however Masuda discloses a double-sided optical discs, wherein the first and second spiral being mirror images of each other (see col. 11, lines 61-65).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify the system of producing double-sided optical discs of Ito, so that the first and second spiral being mirror images of each other as taught by Masuda. One of ordinary skill in the art would have been motivated to do this, because simultaneous recording/reproducing on/from both side of the optical disc can be realized (see col. 12, lines 8-22).

Regarding claims 12 and 13:

Claims 12 and 13 recite similar limitations as claims 4 and 5; hence, claims 12 and 13 are rejected under the same reasons set forth in claims 4 and 5.

Regarding claim 14:

Claim 14 recites similar limitations as claim 10; hence, claim 14 is rejected under the same reasons set forth in claim 10.

Regarding claim 15:

Ito discloses the system wherein at least one of said sets of master discs includes only one master disc (see Figs. 12A-12E; to form the other side of the optical disc, only reference #43 is needed).

Regarding claim 16:

Ito discloses the system wherein at least one of said sets of master discs includes at least two master discs (see Figs. 12A-12C; master discs 19 and 43 corresponds to the set of master discs includes at least two master discs).

Allowable Subject Matter

6. Claim 11 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

In regards to claim 11, none of the reference of record alone or in combination disclose or suggest a system for mass producing optical disc, wherein the first pair of master discs includes an inner and an outer master disc for the first side and the second pair of master discs includes an inner and an outer master disc for the second side.

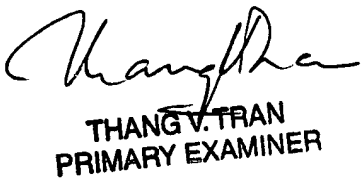
Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lixi Chow whose telephone number is 571-272-7571. The examiner can normally be reached on Mon-Fri, 8:30am to 6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, A. L. Wellington can be reached on 571-272-4483. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

LC 11/9/06



THANG V. TRAN
PRIMARY EXAMINER